

### **OVERVIEW**

The Department of Housing and Urban Development's (HUD's) Project Planning and Management (PPM) Life Cycle is the rigorous application of sound investment and project management principles and best practices. It provides the context for the HUD IT governance process and describes the interdependencies between its project management, investment management, and capital planning components.

Successful management of HUD's IT investments comprises three key components:

- 1. Repeatable processes that comply with all relevant Federal Government standards. mandates, and directives
- 2. Personnel that are thoroughly trained in the execution of these processes
- Tools to support these processes

The PPM Life Cycle provides the basis for solution development excellence at HUD and is one of the major repeatable processes governing IT investments. Any project can use this framework to structure, track, and manage activities and deliverables.

PPM relies on clear and efficient solution specification, design, development and implementation, and subjects projects to continuous review and approval processes. There are seven major phases of the ppm life cycle:

- Need/Concept

Execution of Solution

- Definition
- Design

- Deployment
- Operate & Maintain
- Decommission

Need/Concept

Generate Idea

· Create Preliminary

**Project Charter** 

Assemble the IP1

· Assess Security

· Update Project

Create Project

· Create Cost of

Ownership

Schedule (WBS)

· Create PPA

and Privacy

Charter

for a Project

## Definition

Procure Resources

Review, and Accept

(if necessary)

· Create/ Update

Requirements

Create Project

**Business Case** 

# Design

Analyze

requirements

Area Data

Create Logical and

Define Configuration

Management

Procedures

Define Data

Conversion

Physical Data Models

Design product

# Execution of

# Solution

**Components on the PPM Life Cycle** 

- Establish System
- Development Install Development

Develop, Build,

Approve Code

Standards

or Conduct

Conduct User

Obtain Execution

of Solution Phase

Go/No Go Decision

Review, Test, and

- Develop Interface Configure Controls Development environment Establish the
- Create Solution System Design Architecture Identify Subject
- Create QA Plan Create Security and
- Privacy Artifacts Create Full Project Schedule

Artifacts

Prepare additional

Submit Definition

Deliverables for

Go/No Go Decision

Project Management

- Submit Need/ Concept Deliverables
- for Go/No Go Decision CONTROL GATE REVIEWS

  - OCIO Resources Delegated

# Project

# Selection Review

#### Project Baseline Review

Obtain Design Phase

Go/No Go Decision

## Project Design Review

## Iterative Development • (optional)

#### Operational Readiness Review

### Create Installation Plan & Schedule

- Configuration Update Production Operations Procedures
- Update Production Support Procedures

Perform Technical

Deployment

- Conduct Post Define Development
- Acceptance Testing Approve Security Regression Test Documentation

#### Operate & Maintain

 Update Operation Support Documents Tune Application

- System Gather Metrics and Generate
- Performance Reports Implement Operation Troubleshooting
- Conduct Annual Deployment/Warrant Security Assessment Support and Close
- Create/ Review and Out Project Approve Security Create/ Review and Documentation

Post

Implementation

Review

# Decommission

- Analyze Decommission Requirements and Schedule
- Arrange and Archive Records
- Conduct Final Backups
- Shut Down the System
- Archive Information and Reallocate or Salvage Equipment



Monthly

Availability

Reports

Decommission Review

### ALTERNATIVE SOLUTION DEVELOPMENT METHODOLOGIES

An important objective of the PPM life cycle is to provide flexibility that allows tailoring of the methodology to suit the characteristics of a particular solution development effort. In concert with the integrated project team (IPT) members and IT project managers (PMs), business PMs may select the solution development methodology (or alternative work pattern) that best fits their needs and identify the artifacts needed for project. This moves HUD away from a 'one-size fits all' approach to project planning and management.

Alternative work patterns empower project managers to tailor tasks in order to meet the specific needs of the project while maintaining compliance with solution development methodology (SDM) standards. SDM specialists will collaborate with IPT

members to ensure that a project planner's customization does not overlook necessary activities or include unneeded ones. Some of the most popular, time and cost effective alternative work pattern models are:

- Reduced Effort (Small Application Development) Work Pattern
- Rapid Application Development (RAD)
- Pilot Development Work Pattern
- Agile Work Pattern
- Government off the Shelf (GOTS)/Commercial off the Shelf (COTS)
- Software as a Service (SaaS)

# Tailoring Projects

The PPM Life Cycle may be tailored to address the circumstances of each individual project using cost, interoperability, and exposure indicators. It aims to capture the minimum level of detail necessary to ensure project success. The decisions of PPM tailoring are captured in the Project Process Agreement (PPA), which documents the reasons for using, combining, or skipping specific artifacts applicable to the project.

Projects are classified as small, medium, or large based on the following criteria:

**Cost** - A project's estimated development, modernization, or enhancement (DME) life cycle cost is an indicator of potential risk. Projects with high DME costs have typically greater opportunities to derail and may require additional documentation than those with low DME costs.

**Interoperability** - Refers to the number of business areas or systems impacted by the project.

**Exposure** - Defined as the level of interest in meeting project goals, i.e., business unit branch or division, senior mission area leader, the Secretary, OMB, Congress or other external entities.

The classification also determines the level of oversight and decision-making that is applicable to the project. The Technical Review Sub-Committee (TRC) is the decision making authority for small projects; the Customer Care Committee (CCC) for medium projects; and the Executive Investment Board (EIB) for large projects. Decision making authority is illustrated in this table.

Cost	Interoperability	Exposure	Decision making Authority
Less than \$500,000	One program area	None of the below	TRC
\$500,000 to \$5 million	Two program areas	GDAS interest	CCC
Greater than \$5 million	Three or more program areas	Secretary interest	EIB

# **Key PPM Stakeholders**

**Customer Relationship Coordinator** - Acts as the single point of contact between business areas and OCIO resources and facilitates the flow of information and deliverables between them.

IT Project Manager — Develops and obtains consensus on project plans (tasks, schedules, resource assignments). Oversees the day-to-day execution of the project, facilitates resolution of issues and reports status at regular intervals. Develops and maintains effective methods of communication between the project's shareholders and creates the project's communication plan and risk management plan. At the end of each phase, IT PMs create/update a lessons learned document detailing any important learning opportunities that arose throughout the PPM phases

**Business Project Manager** – Represents the customer's and user's interests/needs and coordinates with the Project Sponsor when needed to resolve any issues and concerns that may arise.

Integrated Project Team (IPT) – Consists of individuals who have a stake in the success (or failure) of the project. Assists in creating all artifacts and activities required within the PPM.

**TRC Project Review Member** – Monitors all of HUD's IT projects and provides analysis to the IRC, CCC, and EIB as needed. Acts as a control gate in each phase of the PPM to ensure that necessary project artifacts are produced and contain the necessary content.

# **Additional Information:**

For additional PPM details and access to all the PPM artifacts, please visit our intranet site:

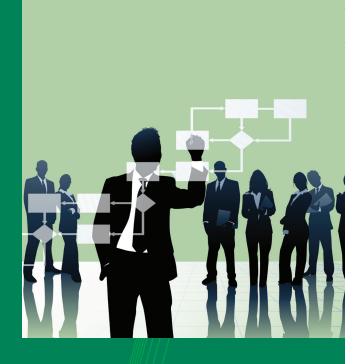
http://hudatwork.hud.gov/po/i/itm/ppm/ppm.cfm

To provide feedback and exchange ideas on enhancing PPM artifacts, please visit our SharePoint site: http://hudsharepoint.hud.gov/sites/ocio/ocio/IT\_IM/default.aspx

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Project Planning and Management (PPM)
Life Cycle Overview